"Teflon™" renders the scope of the claim uncertain because a trademark denotes the manufacturer, not the product, and the product covered by a trademark or trade name can vary.

Accordingly, the claims have been amended to include the generic reference to "plastic" whereby "Teflon™" is a specialized form thereof.

Rejections under 35 USC 103

Rejections of Claims 1-3, 8-10, and 16-18

Claims 1-3, 8-10, and 16-18 are rejected under 35 USC 103(a) as being unpatentable over Tsukamoto (US Patent #5,868,848) in view of Zhao et al. (US Patent #5,589,003).

The Examiner states that Tsukamoto discloses (in Figure 1) a plasma device with chuck. The Examiner then makes reference to the Applicant's claim language which discloses a chuck (11) with a focus ring, or "annular dielectric body" 71, and a "tube-shaped portion" 72. However, the Examiner notes that the flange of the "tube-shaped portion" of Tsukamoto is not fully embedded in the dielectric body (See Tsukamoto col. 6, lines 43-47).

The Examiner then cites Zhao et al. which teaches a plasma chuck which has a groove 20 which accepts a flange 28 (i.e. imbedded therein) in order to secure the shield assembly 10 (See Zhao col. 4, lines 35-38). The Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have embedded the "tube-shaped portion" flange into the focus ring dielectric body 71 in the plasma device of Tsukamoto as taught by Zhao et al. because such a modification would have advantageously secured the "tube-shaped portion" to the "dielectric body" thereby suggesting the modification.

Referring to Tsukamoto, however, Figure 4 shows an inner focus ring 71 (made of conductive material such as silicon) being first placed on a susceptor 5, and then being penetrated by a measuring electrode 73 which screwably attaches to the susceptor. An outer focus ring 72 (made of quartz having insulation property) is then "placed around an electrostatic chuck 11 in this order." (See Tsukamoto, col. 6, lines 30-47 -- emphasis added). As shown in Figure 4, the inner focus ring 71 provides an L-shaped bevel which interacts with a reciprocally matching L-shaped bevel on the outer focus ring 72. As such, this orientation method allows the outer focus ring to be attached or removed conveniently from

the inner focus ring, wherein the inner ring does not surround or encompass the outer focus ring.

Zhao discloses a shielded substrate support structure (for processing chambers) which in particular, protects the base of the substrate support from attack during chemical cleaning operations using a base shield. Referring to Figures 3 and 4, a substrate support base structure 8 (typically made from aluminum) has a groove 20 which interacts with a rim 28 on a skirt structure 12. In operation, when the device operates at temperature, the base structure 8 expands outward and the rim 28 penetrates the groove 20 to prevent removal of the base shield from the base.

In contrast to the cited prior art, the present invention claims, in relevant part, a tube-shaped portion being disposed outside of an annular dielectric body and surrounding at least part of the annular dielectric body. In order for the present invention to be obvious over Tsukamoto in view of Zhao, Tsukamoto must teach or suggest the modification presented by Zhao so that it would have been obvious to one of ordinary skill in the art to combine the two references. Tsukamoto does not teach or suggest the method or structure presented by Zhao. Instead, Tsukamoto discloses an assembly structure which would be hindered by the inner focus ring (71) surrounding (at least part of) the outer focus ring (72) because the outer focus ring could not be readily placed over the inner focus ring. Moreover, Zhao discloses a structure which relies upon thermal expansion of one of the elements in order to have interaction of the parts. In light of such differences, the Applicant respectfully submits that Tsukamoto does not teach or suggest the combination of its elements with Zhao, nor would such a combination be inherent. Additionally, any such combination of the cited disclosures would not produce the results achieved by the present invention.

For the reasons cited above, the Applicant respectfully requests withdrawal of the rejection of Claims 1-3, 8-10, and 16-18.

Rejection of Claim 15

The Examiner additionally rejected Claim 15 under 35 USC 103(a) as being unpatentable over Tsukamoto in view of Zhao et al. as applied above, and further in view of the Applicant's prior art reference in Figure 1. The Examiner stated that the Tsukamoto/Zhao et al. combination, as noted above, shows a dielectric body focus ring with a "tube-shaped portion" flange embedded therein. The Examiner further states, however, that the combination does not show a confinement ring. The Examiner then refers to the Applicant's

admitted prior art in Figure 1 which discloses a confinement ring in order to help confine the plasma to the region above the substrate being processed. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have added the well-known confinement ring shown by the Applicant's prior art Figure 1 to the plasma device of the Tsukamoto/Zhao et al. combination.

For the reasons stated above, the Applicant respectfully submits that the combination of Tsukamoto and Zhao is not obvious, particularly in light of the functionality desired and achieved by the different references. As a result, the Applicant believes that Claim 8 is allowable subject matter. The Applicant also believes that the addition of the non-obvious confinement ring element to Claim 8 renders Claim 15 further allowable.

Accordingly, the Applicant respectfully requests withdrawal of the rejection to Claim 15.

Allowable Subject Matter

Claims 4-6, 11-13, and 19-21 were objected to as being dependent upon a rejected base claim, but the Examiner stated that they would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. The Applicant has rewritten Claim 4 to include such limitations, and Claims 5-6 depend therefrom. Claim 11 has been rewritten to include such limitations, and Claims 12-13 depend therefrom. Claim 19 has been rewritten to include such limitations and Claims 20-21 depend therefrom. Accordingly, Claims 4-6, 11-13, and 19-21 now stand as allowable subject matter.

The Examiner further stated that Claims 7, 14, and 22 would be allowable if rewritten to overcome the rejections under 35 USC 112, 2nd paragraph, set forth above. Claims 7, 14, and 22 have been amended to refer to the more generic term "plastic" of which TEFLON is a form thereof. Accordingly, the Applicant believes that this renders the claims sufficiently definite and therefore allowable.

Drawings

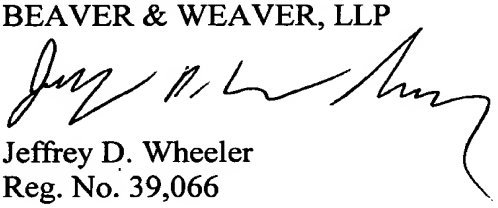
Given that allowable subject matter was indicated, the Examiner has encouraged the submission of formal drawings. At this time, the Applicant submits the corrected informal drawings and will submit formal drawings in a timely fashion hereafter.

CONCLUSION

In view of the amendments and remarks above, Applicant believes that pending claims 1-22 are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

If any fees are due in connection with filing this amendment, the Commissioner is authorized to charge such fees to Deposit Account 50-0388 (Order No. LAM1P089). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
BEAVER & WEAVER, LLP



Jeffrey D. Wheeler
Reg. No. 39,066

P.O. Box 61059
Palo Alto, CA 94306
(650) 493-2100